

REMARKS

Applicant hereby traverses the outstanding rejections, and requests reconsideration and withdrawal in light of the remarks contained herein. Claims 1-20 are pending in this application.

Rejection under 35 U.S.C. §103(a)

Claims 1-6, 9-15, and 18-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hong ('964) in view of Sturgess ('893).

Improper Rejection

The Office Action does not comply with the mandates of *Graham v. John Deere*. The test for non-obvious subject matter is whether the differences between the subject matter and the prior art are such that the claimed subject matter as a whole would have been obvious to a person having ordinary skill in the art to which the subject matter pertains. The United States Supreme Court in *Graham v. John Deere and Co.*, 383 U.S. 1 (1966) set forth the factual inquiries which must be considered in applying the statutory test: (1) determining of the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the pertinent art, and (4) evaluate evidence of secondary considerations. See M.P.E.P. § 2141.

The M.P.E.P. § 706.02(j), incorporates the mandate of *Graham v. John Deere* and directs the Examiner to set forth in the Office action: (1) the relevant teachings of the prior art relied upon; (2) the difference or differences in the claim over the applied references; (3) the proposed modification of the applied references necessary to arrive at the claimed subject matter; and (4) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification.

In describing the rejection of claims 1-6, 9-15, and 18-20, the Examiner states that Hong teaches "the graphics pseudo-pixels output from attribute controller 233...col. 10, lines 15-20" as well as "serializer 236", "graphics back-end pipeline 205", "color comparison circuitry 302", and "video back-end pipeline 204". However, Applicant notes the Hong does not teach any of these elements. The largest figure identifier is 88, which is used in Figure 4B. Moreover, column 10 of Hong is the claims section. Furthermore, these elements are

not in Sturgess. The Examiner cites these elements as reading upon the selectively configurable interconnection matrix of claim 1, as well as selectively configuring a pipeline interconnection matrix of claim 10, and the switch of claim 19. Consequently, the Office Action fails to comply with the first mandate, namely set forth the relevant teachings of the prior art relied upon.

Therefore the rejection of claims 1-6, 9-15, and 18-20 under 35 U.S.C. § 103 is improper and should be withdrawn, and claims 1-6, 9-15, and 18-20 should be indicated as allowable over the prior art of record.

No Prima Facie Case of Obviousness

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. See M.P.E.P. § 2143. Without conceding the second criteria, Applicant asserts that the rejection does not satisfy the first and third criteria.

Improper Motivation

The Office Action admits that Hong does not teach having a plurality of stages configured to process a graphic object. The Office Action attempts to cure this deficiency by introducing Sturgess, which the Office Action alleges to teach having such elements. The motivation for making the combination was presented as follows:

“it would have obvious ... to modify the pipelines as taught by Hong with the plurality of stages as taught by Sturgess because it provides for an efficient processing of graphics object data.”

It is well settled that the fact that references can be combined or modified is not sufficient to establish a prima facie case of obviousness, M.P.E.P. § 2143.01. Hong already discloses an efficient device and method for processing graphics data, see the title and the text of the specification beginning on column 4, line 11. Thus, the teaching of Sturgess is not needed for the efficient operation of Hong. Consequently, the language of the provided

motivation is merely a statement that the reference can be modified, and does not state any desirability for making the modification. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ.2d 1430 (Fed. Cir. 1990), as cited in M.P.E.P. § 2143.01. Thus, the motivation provided by the Examiner is improper, as the motivation must establish the desirability for making the modification.

No valid suggestion has been made as to why a combination of and common knowledge is desirable. Therefore, the rejection of claims 1-6, 9-15, and 18-20 should be withdrawn.

Not All Limitations

The Office Action admits that Hong does not teach having a plurality of stages configured to process a graphic object. The Office Action attempts to cure this deficiency by introducing Sturgess, which the Office Action alleges to teach having such elements. However, this combination, as presented, does not teach or suggest all limitations of the claimed invention.

Claim 1 defines an image processor comprising a selectively configurable interconnection matrix defining an image path for providing selected outputs from one or more of said stages of one of said pipelines to selected inputs of one or more of said stages of the other of said pipelines. Hong does not disclose at least these limitations. The Office Action states that in Hong, graphics engine 50 of Figure 3 reads on the claimed graphics pipeline and video display engine 44 reads on the claimed bit map image pipeline. There is no element of Hong that corresponds to the claimed interconnection matrix. In other words, no element of Hong provides an output of a stage of one pipeline (e.g. engine 44) as an input to the other pipeline (e.g. engine 50). Sturgess is not relied upon in the Office Action as having such an element. Thus, the combination of Hong and Sturgess does not teach all of the claimed limitations. Therefore, the Applicant respectfully asserts that for the above reasons claim 1 is patentable over the 35 U.S.C. § 103(a) rejection of record.

Claim 10 defines a method of processing an image comprising selectively configuring a pipeline interconnection matrix to establish an image path through one or more stages of a

graphics pipeline and one or more stages of a bit map image pipeline. The Office Action states that in Hong, graphics engine 50 of Figure 3 reads on the claimed graphics pipeline and video display engine 44 reads on the claimed bit map image pipeline. There is no element of Hong that corresponds to the claimed interconnection matrix. In other words, no element of Hong provides an image path through one stage (or more) of the graphics pipeline (engine 50) and one stage (or more) of the bit map image pipeline (engine 44). Thus, Hong cannot teach the step of selectively configuring a pipeline interconnection matrix. Sturgess is not relied upon in the Office Action as having such an element. Thus, the combination of Hong and Sturgess does not teach all of the claimed limitations. Therefore, the Applicant respectfully asserts that for the above reasons claim 10 is patentable over the 35 U.S.C. § 103(a) rejection of record.

Claim 19 defines an image processor comprising a switch for selectively connecting an output from any one of said processors to an input of any other one of said processors. Hong does not disclose at least these limitations. The Office Action states that in Hong, graphics engine 50 of Figure 3 reads on the claimed first pipeline and video display engine 44 reads on the claimed second pipeline. There is no element of Hong that corresponds to the claimed switch. In other words, no element of Hong provides an output of a processor of one pipeline (e.g. engine 44 or 50) as an input to the any other processor. Sturgess is not relied upon in the Office Action as having such an element. Thus, the combination of Hong and Sturgess does not teach all of the claimed limitations. Therefore, the Applicant respectfully asserts that for the above reasons claim 19 is patentable over the 35 U.S.C. § 103(a) rejection of record.

Claims 2-6, 9, 11-15, 18, and 20 depend directly from base claims 1, 10, and 19, respectively, and thus inherit all limitations of their respective base claims. Each of claims 2-6, 9, 11-15, 18, and 20 sets forth features and limitations not recited by the combination of Hong and Sturgess. Thus, the Applicant respectfully asserts that for the above reasons claims 2-6, 9, 11-15, 18, and 20 are patentable over the 35 U.S.C. § 103(a) rejection of record.

Rejection under 35 U.S.C. §103(a)

Claims 7-8 and 16-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hong ('964) in view of Sturgess ('893), and further in view of Nally et al. ('525, hereinafter Nally).

Improper Rejection

The rejection of claims 1-6, 9-15, and 18-20 is improper as discussed above. The rejection of claims 7-8 and 16-17 relies on the improper rejection, and thus itself is improper. Moreover, in defining the rejection of claim 8 (and claim 17), the Examiner fails to cite any motivation for making the combination. Thus, the Office Action fails to comply with the fourth mandate, namely set forth an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification. Consequently, the rejection of claims 8 and 17 is improper.

Therefore the rejection of claims 7-8 and 16-17 under 35 U.S.C. § 103 is improper and should be withdrawn, and claims 7-8 and 16-17 should be indicated as allowable over the prior art of record.

No Prima Facie Case of Obviousness

Without conceding the first and second criteria, Applicant asserts that the rejection does not satisfy the third criteria.

Not All Limitations

Base claims 1 and 10 are defined as described above. The combination of Hong and Sturgess does not disclose these limitations, as discussed above. Nally is not relied upon in the Office Action as disclosing these limitations. Therefore, the combination of references set forth in this rejection does not teach all elements of the claimed invention.

Claims 7-8 and 16-17 depend directly from base claims 1 and 10, respectively, and thus inherit all limitations of their respective base claims. Each of claims 7-8 and 16-17 sets forth features and limitations not recited by the combination of Hong, Sturgess, and Nally. Thus, the Applicant respectfully asserts that for the above reasons claims 7-8 and 16-17 are patentable over the 35 U.S.C. § 103(a) rejection of record.

Application No.: 09/896,793

Docket No.: 10004829-1

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. According, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-2025, under Order No. 10004829-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV256032194US, in an envelope addressed to: MS Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 09-16-2003

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